AO 88B (Rev. 02/14) Subpoena to Produce Documents, Information, or Objects or to Permit Inspection of Premises in a Civil Action

United States District Court

for the

In re Ex Parte Application of	astern District of Virginia
Nokia Technologies Oy and Alcatel Lucent	SAS
Plaintiff	
V.) Civil Action No. 1:23-mc-00032
)
Defendant	
	CE DOCUMENTS, INFORMATION, OR OBJECTS PECTION OF PREMISES IN A CIVIL ACTION
То:	Amazon.com, Inc.
(Nan	e of person to whom this subpoena is directed)
material: SEE "EXHIBIT 1" ATTACHED	or objects, and to permit inspection, copying, testing, or sampling of the
Place: Alston & Bird	Date and Time:
950 F Street NW, 2nd Floor Washington, DC 20004	9:30 a.m., Wednesday, December 20, 2023
other property possessed or controlled by you	OMMANDED to permit entry onto the designated premises, land, or at the time, date, and location set forth below, so that the requesting party c, or sample the property or any designated object or operation on it.
Place:	Date and Time:
O 1	iv. P. 45 are attached – Rule 45(c), relating to the place of compliance; son subject to a subpoena; and Rule 45(e) and (g), relating to your duty to sequences of not doing so.
CLERK OF COURT	OR
Signature of Cle	rk or Deputy Clerk Attorney's signature
	one number of the attorney representing (name of party)
lokia Technologies Oy and Alcatel Lucent SAS	, who issues or requests this subpoena, are:

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

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Civil Action No.

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this sub	ppoena for (name of individual and title, if an	my)	
late)	·		
☐ I served the sul	bpoena by delivering a copy to the nar	med person as follows:	
		on (date)	or
☐ I returned the s	subpoena unexecuted because:		
tendered to the wi		States, or one of its officers or agents, I are, and the mileage allowed by law, in the	
ees are \$		for services, for a total of \$	0.00
I declare under pe	nalty of perjury that this information i	s true.	
:	_		
		Server's signature	
		Printed name and title	

Additional information regarding attempted service, etc.:

EXHIBIT 1

EXHIBIT 1 TO SUBPOENA

DEFINITIONS

As used in the requests below, the following specially defined terms and phrases shall have the following meanings:

- 1. "Amazon," "You," or "Your" means Amazon.com Inc., and any of its present or former affiliates, predecessors, successors, subsidiaries (whether owned directly or indirectly), assigns, divisions and operating units thereof, employees, agents, representatives, directors, officers, and entities under common control with Amazon.
- 2. "Nokia" means Nokia Technologies Oy, including its predecessors, successors, parents, subsidiaries (whether owned directly or indirectly), affiliates, divisions and operating units thereof, agents and entities under common control with it.
 - 3. "CDS" means a content distribution system.
 - 4. "CSN" means a content storage node.
- 5. "Documents" means all matter discoverable under the Federal Rules, including, without limitation, original and non-identical copies of all written, printed or electronic matter of any kind including electronically stored information, or ESI; correspondence, memoranda, notes, opinions, compilations, chronicles, minutes, agendas, contracts, agreements, reports, summaries, inter-office and intra-office communications, diaries, appointment books or calendars, confirmations, and all drafts, alterations, modifications, changes and amendments of any of the foregoing; electronic, mechanical, or electric data, records and representations of any kind, including, without limitation, e-mails, tapes, cassettes, disks, computer hard drives, magnetic cards and recordings (whether or not ever printed out or displayed); and all graphic or manual records of representations of any kind including, without limitation, photographs, microfiche, microfilm, videotape, DVDs, and motion pictures.

- 6. "Technical Documents" means schematics, flow charts, engineering drawings, logic diagrams, circuit diagrams, block diagrams, design specifications, high-level, mid-level, or low-level design review documents, top level or low level module documents, training documentation, data sheets, integration information and guidelines, Computer Aided Design ("CAD") files, including GDS files, process flow diagrams and/or state machine diagrams, test procedures, compliance test results, and any other piece or part drawings.
- 7. "Communication" means any contact between two or more entities by which any information or knowledge is transmitted or conveyed or attempted to be transmitted or conveyed, including written contact including letters, memoranda, telegrams, telefaxes, telecopies, telexes or e-mails, text messages and oral contact including face-to-face meetings, telephone conversations, voicemails, answering machine messages, and telephonic notes.
- 8. "Source Code" means any source code for software or firmware, hardware code, assembly code, or other computer code, including but not limited to any code written in an assembly language, C, C++, VHDL, Verilog, or other programming or hardware description language.
- 9. "Person" or "persons" means an individual, corporation, proprietorship, partnership, association, or any other entity.
- 10. "Entity" means any natural person, corporation, partnership, sole proprietorship, firm, board, joint venture, association, agency, authority, commission or other business entity or juristic person.
- 11. "Relating to" or "related to" when referring to any given subject matter mean, without limitation, any document that constitutes, comprises, involves, contains, embodies,

reflects, identifies, states, refers directly or indirectly to, or is in any way relevant to the particular subject matter identified.

- 12. The term "identify" when used in conjunction with a person means to provide, to the extent known, the person's full name, present or last known address, and telephone number, and when referring to a natural person, additionally, the present or last known place of employment and, when referring to a current or former director, officer, manager or other employee of Amazon, additionally the title(s) or position(s) held by such person, the time periods during which such person held such position(s), and a description of the responsibilities of such person to those position(s).
- 13. The term "identify" when used in conjunction with a document or other thing means to specify the document or thing in sufficient detail to permit Nokia to locate the document or thing.
 - 14. "Including" or any variant thereof means "including without limitation."
- 15. "And" and "or" mean "and/or," and shall be construed both conjunctively as well as disjunctively in order to maximize their scope.
 - 16. "Any" and "all" mean "any and all."
 - 17. "Each" and "every" mean "each and every."
- 18. "Merge Mode" means the HEVC feature specified in sections 8.5.3.2.2 ("8.5.3.2.2 Derivation process for luma motion vectors for merge mode") and 8.5.3.2.3 ("Derivation process for spatial merging candidates") of the HEVC December 2016 Standard.

INSTRUCTIONS

1. You are requested to produce all Documents in the following categories that are in your possession, custody or control, or within the possession, custody or control of your

agents, servants, employees and your attorneys, in their entirety and without redaction or expurgation. "Possession, custody or control" shall be construed to the fullest extent provided under Rules 34 and 45 of the Federal Rules of Civil Procedure and shall include, without limitation, those Documents in the hands of any other Person that you have the ability to demand or to gain access to in the ordinary course of business. This includes documents placed in storage facilities or warehouses.

- 2. For each request, please search all locations (including computers and networks) and inquire of all persons either known or reasonably likely to contain or possess documents or things called for by the request.
- 3. You shall produce Documents for inspection as they are kept in the normal course of business or shall organize and label them to correspond with the specifications of these requests, as required by Rule 45 of the Federal Rules of Civil Procedure. You shall supplement your responses to these document requests as required by Rule 26 of the Federal Rules of Civil Procedure. In either case, and unless otherwise requested or agreed: (a) you may produce photocopies of the responsive documents, as well as photocopies of all associated file labels, file headings, and file folders together with the responsive documents from each file; (b) if any documents cannot be legibly copied or scanned, so state in your responses and provide a date, time, and location for its inspection in original form; (c) staple or clip all photocopies in the same manner as the originals; and (d) give each page a discrete production number.
- 4. If multiple copies of a document exist, produce every copy on which there are any notations or markings of any sort that do not appear on any other copy.
- 5. Documents produced are to be clearly designated so as to reflect their owner and custodian and the location from where they were produced, including any file, diskette, or other

particular container or repository from which each Document was produced and the location of such container or repository.

- 6. If any Document is withheld based upon a claim of privilege or other protection, provide for each such Document: (i) the date of the Document, (ii) the names of all authors, (iii) the names of all recipients, (iv) the names of all persons who, to your knowledge, have seen the Document, (v) the names of all cc and/or bcc recipients, (vi) the type of Document, (vii) a description of the Document, (viii) an identification of the privilege or protection claimed, and (ix) a brief explanation of the basis of your claim of privilege or other protection.
- 7. If you or your attorneys, agents, or employees know of the existence, past or present, of any document described in any request, but the document is not presently in your possession, custody, or control, or in the possession, custody, or control of your agents, representatives, or attorneys, identify the document and the individual in whose possession, custody, or control the document was last known to reside. If the document no longer exists, state when, how, and why the document ceased to exist.
- 8. Electronically stored information is generally to be produced, at your option, in either (a) its native file format or (b) in Tagged Image File Format ("TIFF") with optical character recognition ("OCR"). However, Microsoft Excel Spreadsheets and Power Point files are to be produced in their native format with all metadata intact.
 - 9. Unless otherwise indicated, these requests are not time or date limited.
- 10. These requests are continuing and require you to supplement your responses pursuant to Federal Rule of Civil Procedure 26(e) within a reasonable time if you obtain or become aware of any further information responsive to these requests for documents.

DOCUMENTS TO BE PRODUCED

REQUEST FOR PRODUCTION 1:

All Documents, including Technical Documents, sufficient to show how Amazon Prime Video (including Freevee and Twitch) encodes video for streaming and/or playback in Germany using bitstreams which can be decoded by an HEVC decoder.

REQUEST FOR PRODUCTION 2:

All Documents, including Technical Documents, sufficient to show whether and to what extent Amazon Prime Video (including Freevee and Twitch) utilizes the HEVC Merge Mode feature when encoding video for streaming and/or playback in Germany using bitstreams which can be decoded by an HEVC decoder.

REQUEST FOR PRODUCTION 3:

All Documents, including Technical Documents, sufficient to show how Amazon Prime Video (including Freevee and Twitch) utilizes a CDS for delivery of media content in Germany, where the CDS is comprised of CSNs and where each CSN includes a portion of memory allocated to federated space, including but not limited to how Amazon utilizes its CloudFront and/or Origin Shield systems and/or sharding technology to cache media for Amazon Prime Video (including Freevee and Twitch).

REQUEST FOR PRODUCTION 4:

Unencrypted copies of HEVC bitstreams sufficient to show how Amazon Prime Video (including Freevee and Twitch) encodes video for streaming and/or playback in Germany using bitstreams which can be decoded by an HEVC decoder, or in the alternative, encrypted copies of such bitstreams along with the encryption key sufficient for decrypting each bitstream.

REQUEST FOR PRODUCTION 5:

Unencrypted copies of HEVC bitstreams sufficient to show instances in which Amazon Prime Video (including Freevee and Twitch) encodes video for streaming and/or playback in Germany using bitstreams which can be decoded by an HEVC decoder, specifically where the bitstreams includes the merge flag set to 1 as part of Merge Mode encoding, or in the alternative, encrypted copies of such bitstreams along with the encryption key sufficient for decrypting each bitstream.

REQUEST FOR PRODUCTION 6:

All Source Code for Amazon software that enables Amazon Prime Video (including Freevee and Twitch) to encode video for streaming and/or playback in Germany using bitstreams which can be decoded by an HEVC decoder, including but not limited to any Source Code that enables Merge Mode during HEVC encoding.

REQUEST FOR PRODUCTION 7:

All technical specifications that describe how Amazon software and/or hardware enables Amazon Prime Video (including Freevee and Twitch) to encode video for streaming and/or playback in Germany using bitstreams which can be decoded by an HEVC decoder, including but not limited to any technical specifications that describes how Merge Mode is enabled during HEVC encoding.

REQUEST FOR PRODUCTION 8:

All technical schematics or diagrams that show how Amazon software and/or hardware enables Amazon Prime Video (including Freevee and Twitch) to encode video for streaming and/or playback in Germany using bitstreams which can be decoded by an HEVC decoder,

including but not limited to any technical schematics or diagrams that shows how Merge Mode is enabled during HEVC encoding.

REQUEST FOR PRODUCTION 9:

All Source Code for Amazon software that enables Amazon Prime Video (including Freevee and Twitch) to encode video for streaming and/or playback in Germany using bitstreams which can be decoded by an HEVC decoder, where the Source Code specifically shows the Merge Mode order of operation for determining the maximum number of spatial motion vector prediction candidates in the merge list and the maximum number of spatial motion vector prediction candidates in the merge list (per sections 7.3.6.1 and 7.4.7.1 of the HEVC December 2016 Standard).

REQUEST FOR PRODUCTION 10:

All technical specifications that describe how Amazon software and/or hardware enables Amazon Prime Video (including Freevee and Twitch) to encode video for streaming and/or playback in Germany using bitstreams which can be decoded by an HEVC decoder, where the technical specifications specifically shows the Merge Mode order of operation for determining the maximum number of spatial motion vector prediction candidates in the merge list and the maximum number of spatial motion vector prediction candidates in the merge list (per sections 7.3.6.1 and 7.4.7.1 of the HEVC December 2016 Standard).

REQUEST FOR PRODUCTION 11:

All technical schematics or diagrams that show how Amazon software and/or hardware enables Amazon Prime Video (including Freevee and Twitch) to encode video for streaming and/or playback in Germany using bitstreams which can be decoded by an HEVC decoder, where

technical schematics or diagrams specifically shows the Merge Mode order of operation for determining the maximum number of spatial motion vector prediction candidates in the merge list and the maximum number of spatial motion vector prediction candidates in the merge list (per sections 7.3.6.1 and 7.4.7.1 of the HEVC December 2016 Standard).

REQUEST FOR PRODUCTION 12:

All Source Code for Amazon software that enables Amazon Prime Video (including Freevee and Twitch) to encode video for streaming and/or playback in Germany using bitstreams which can be decoded by an HEVC decoder, where the Source Code specifically shows whether and to what extent the merge list is limited to the maximum number indicated by five minus max num merge cand (per section 7.4.7.1 of the HEVC December 2016 Standard).

REQUEST FOR PRODUCTION 13:

All technical specifications that describe how Amazon software and/or hardware enables Amazon Prime Video (including Freevee and Twitch) to encode video for streaming and/or playback in Germany using bitstreams which can be decoded by an HEVC decoder, where the technical specifications specifically shows whether and to what extent the merge list is limited to the maximum number indicated by five_minus_max_num_merge_cand (per section 7.4.7.1 of the HEVC December 2016 Standard).

REQUEST FOR PRODUCTION 14:

All technical schematics or diagrams that show how Amazon software and/or hardware enables Amazon Prime Video (including Freevee and Twitch) to encode video for streaming and/or playback in Germany using bitstreams which can be decoded by an HEVC decoder, where technical schematics or diagrams specifically shows whether and to what extent the merge list is

limited to the maximum number indicated by five_minus_max_num_merge_cand (per section 7.4.7.1 of the HEVC December 2016 Standard).

REQUEST FOR PRODUCTION 15:

All Source Code for Amazon software that enables Amazon Prime Video (including Freevee and Twitch) to encode video for streaming and/or playback in Germany using bitstreams which can be decoded by an HEVC decoder, where the Source Code specifically shows:

- (i) that STSA pictures and/or TSA pictures (per sections 3.143 or 3.157 of the HEVCDecember 2016 Standard) are inserted in the bitstream,
- (ii) that the STSA and/or TSA pictures are predicted based on using inter prediction from a reference picture (per section 3.122 of the HEVC December 2016 Standard), and/or
- (iii) that a reference picture is associated with a temporal sub-layer (per section 3.155 of the HEVC December 2016 Standard) being lower than the temporal sub-layer associated with the STSA and/or TSA picture predicted based on using inter prediction from this reference picture (the temporal sub-layer of a picture defined by syntax element "nuh_temporal_id_plus1" according to section 7.3.1.2 of HEVC December 2016 Standard).

REQUEST FOR PRODUCTION 16:

All technical specifications that describe how Amazon software and/or hardware enables

Amazon Prime Video (including Freevee and Twitch) to encode video for streaming and/or

playback in Germany using bitstreams which can be decoded by an HEVC decoder, where the Source Code specifically shows:

- (i) that STSA pictures and/or TSA pictures (per sections 3.143 or 3.157 of the HEVC December 2016 Standard) are inserted in the bitstream,
- (ii) that the STSA and/or TSA pictures are predicted based on using inter prediction from a reference picture (per section 3.122 of the HEVC December 2016 Standard), and/or
- (iii) that a reference picture is associated with a temporal sub-layer (per section 3.155 of the HEVC December 2016 Standard) being lower than the temporal sub-layer associated with the STSA and/or TSA picture predicted based on using inter prediction from this reference picture (the temporal sub-layer of a picture defined by syntax element "nuh_temporal_id_plus1" according to section 7.3.1.2 of HEVC December 2016 Standard).

REQUEST FOR PRODUCTION 17:

All technical schematics or diagrams that show how Amazon software and/or hardware enables Amazon Prime Video (including Freevee and Twitch) to encode video for streaming and/or playback in Germany using bitstreams which can be decoded by an HEVC decoder, where the Source Code specifically shows:

that STSA pictures and/or TSA pictures (per sections 3.143 or 3.157 of the HEVCDecember 2016 Standard) are inserted in the bitstream,

- (ii) that the STSA and/or TSA pictures are predicted based on using inter prediction from a reference picture (per section 3.122 of the HEVC December 2016 Standard), and/or
- (iii) that a reference picture is associated with a temporal sub-layer (per section 3.155 of the HEVC December 2016 Standard) being lower than the temporal sub-layer associated with the STSA and/or TSA picture predicted based on using inter prediction from this reference picture (the temporal sub-layer of a picture defined by syntax element "nuh_temporal_id_plus1" according to section 7.3.1.2 of HEVC December 2016 Standard).

REQUEST FOR PRODUCTION 18:

Unencrypted copies of HEVC bitstreams sufficient to show how Amazon Prime Video (including Freevee and Twitch) encodes video for streaming and/or playback in Germany using bitstreams which can be decoded by an HEVC decoder, specifically where the bitstreams includes STSA pictures and/or TSA pictures (per sections 3.143 or 3.157 of the HEVC December 2016 Standard) inserted in the bitstreams, or in the alternative, encrypted copies of such bitstreams along with the encryption key sufficient for decrypting each bitstream.

REQUEST FOR PRODUCTION 19:

All Source Code for Amazon software that enables Amazon Prime Video (including Freevee and Twitch) to utilize a CDS for delivery of media content in Germany, where the CDS is comprised of CSNs and where each CSN includes a portion of memory allocated to federated space, including but not limited to how Amazon utilizes its CloudFront and/or Origin Shield

systems and/or sharding technology to cache media for Amazon Prime Video (including Freevee and Twitch).

REQUEST FOR PRODUCTION 20:

All technical specifications that describe how Amazon software and/or hardware enables Amazon Prime Video (including Freevee and Twitch) to utilize a CDS for delivery of media content in Germany, where the CDS is comprised of CSNs and where each CSN includes a portion of memory allocated to federated space, including but not limited to how Amazon utilizes its CloudFront and/or Origin Shield systems and/or sharding technology to cache media for Amazon Prime Video (including Freevee and Twitch).

REQUEST FOR PRODUCTION 21:

All technical schematics or diagrams that show how Amazon software and/or hardware enables Amazon Prime Video (including Freevee and Twitch) to utilize a CDS for delivery of media content in Germany, where the CDS is comprised of CSNs and where each CSN includes a portion of memory allocated to federated space, including but not limited to how Amazon utilizes its CloudFront and/or Origin Shield systems and/or sharding technology to cache media for Amazon Prime Video (including Freevee and Twitch).